Prairie Dog Biology Fact Sheet

Common Name: Black-tailed Prairie Dog **Scientific Name:** *Cynomys ludovicianus*

Habitat: Found on plains and plateaus of North America from southern Saskatchewan to northern Mexico.

Diet: Herbivorous; eats mostly grasses and forbs. Forbs, often called weeds, are dicotyledons and include individual plants from many families. The general term forb refers to any herbaceous, broadleaf plant without regard to family classification.

Profile: The Black-tailed Prairie Dog is not a dog, but a stout, burrowing ground squirrel named for its barking call. These "dogs" live in the western U.S. in ten states: Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. It is extirpated from Arizona. Roughly half of the U.S. prairie dog population lives in South Dakota, Montana and Wyoming. Black-tailed Prairie Dogs occupy less than 1 percent of the land they once occupied a century ago (Miller et al. 1994).

The prairie dogs excavate elaborate systems of burrows in flat prairie lands and create "towns" comprised of thousands of animals. The burrows are easily identified because of the large mound of dirt surrounding the entrance, providing a vantage point to spot approaching predators as well as flood protection.

Life and Reproduction: Prairie dogs have a low rate of reproduction compared with other small mammals. They become reproductively viable at two years of age, breed only once a year, and the average litter size is three to four pups. Their lifespan is typically 4-5 years in the wild.

Prairie Dogs as "Keystone Species"

The Black-tailed Prairie Dog is a "keystone species" -- defined as one whose presence and activities are critical to the entire ecosystem. Black-tailed Prairie Dogs create an environment around their colonies -- huge complexes of tunnels and mounds surrounded by short-clipped grass that provide homes and shelter for a myriad of creatures. The Black-tailed Prairie Dog is a critical food source for a number of animals - including several birds of prey. Since Black-tailed Prairie Dogs are the only prairie dog species, and one of only a few rodents that do not hibernate in the winter, they are vitally important winter food sources for prairie predators.

Biologists have concluded that nine prairie species are dependent on prairie dogs (Kotliar et al. 1999), an additional 20 species opportunistically take advantage of prairie dog colonies, and a total of 117 species have some relationship with prairie dog colonies (Reading et al. 1989). Those species that are considered dependent on prairie dogs are:

-Burrowing owl	-Golden eagle	-Ferruginous hawk	-Black-footed ferret
-Mountain plover	-Horned lark	-Grasshopper mouse	-Deer mouse
-Swift fox			

"Prairie dogs have been part of the Texas ecosystem for millions of years and are a reflection of healthy ecosystems. Today, it is estimated that 98 percent of the population has been lost, and that only three hundred thousand prairie dogs remain in Texas," states mammalogist Dr. David Schmidly.

The Western Association of Fish and Wildlife Agencies stated in their Black-Tailed Prairie Dog Memorandum of Understanding (1999) that: "All member affected agencies agree that Black-tailed Prairie Dogs are an important natural component of the short to mid-grass ecosystem. As such Black-tailed Prairie Dogs serve as an indicator of the overall health of this important habitat type in western North America. Further, the presence and abundance of Black-tailed Prairie Dogs reflects humankind's commitment to maintaining all natural components of the short to mid-grass ecosystem so that all uses of this type are sustainable over time."

References:

Kotliar, Natasha B., Bruce W. Baker, April D. Whicker, Glenn Plumb. 1999. "A critical review of assumptions about the prairie dog as a keystone species." *Environmental Management* 24 (2): 177-192.

Miller, B., G Ceballos, and R.P. Reading. 1994. "The Prairie Dog and Biotic Diversity." *Conservation Biology* 8:677-681.

Reading, R.P. et al. 1989. "Attributes of Black-Tailed Prairie Dog Colonies in Northcentral Montana, with Management Recommendations for the Conservation of Biodiversity." The Prairie Dog Ecosystem: Managing for Biological Diversity. Montana BLM Wildlife Technical Bulletin No. 2.

Western Association of Fish and Wildlife Agencies. 1999. Black-tailed Prairie Dog Memorandum of Understanding.